

حمل الآن

مجانا وحصريا

امتحانات رقم (1)

الترم الثاني





Five Sample Tests

٥ اختبارات على المنهج بالكامل

Sample Test 1

1 Choose the correct answer from a, b, c or d.

- is from artificial intelligence applications in our daily life.
a. Personal assistant b. Smart shopping
c. Smart cars d. All of them
- In robot device is considered the senses of a robot just as eyes and ears.
a. structure b. motors c. sensors d. controller
- The Block "Go to Random Position" in Scratch program is used to.....
a. move sprite to specific position b. move the sprite in a random motion
c. hide sprite d. delete sprite
- is an understandable language and it use words similar to english.
a. Python b. Java c. C# d. C++
- is a function that is used to display text, values on screen.
a. Type () b. Print () c. Editor d. Python shell

2 Complete the following sentences with the appropriate words in brackets.

(Signal Conversion – Software – sprites – Super AI – Save to your computer)

- The most advanced artificial intelligence is
- The second step of sensor device work is
- is what makes a robot smart and determine how it responds to information.
- To save your project in Scratch program select from file menu.
- In Scratch program you can hide / show sprite from area.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

- You can change the sprite movement direction by move command. ()
- Scratch program doesn't enhance collaboration skills or creative thinking. ()
- The controller is the brain of the robot, processing the data collected by sensors and issuing command to motors. ()
- The first step of the sensor device work is displaying the results. ()
- The artificial intelligence needs a huge amount of information. ()

Sample Test 2

1 Choose the correct answer from a, b, c or d.

1. sensors device help cars to determine the distance to other cars.
 a. Sound b. Visible light c. Infrared d. Distance
2. To add a new sprite click on
 a. choose sprite b. Stage c. when  clicked d. Motion
3. is a device that can be programmed to perform tasks automatically.
 a. Sensor b. Scratch c. Robot d. Python
4. Robot help in dangerous tasks like
 a. cleaning house b. transportation system
 c. agricultural watering
 d. heavy weights and hazardous chemicals
5. Applications of artificial intelligence in our daily life like
 a. smart shopping b. personal assistance
 c. Both (a , b) d. none of them

2 Complete the following sentences with the appropriate words in brackets.

(Choose a sprite – add or delete sprite – integer (int) – Super AI – picking up information)

1. In Python language $X = 5$ The variable X data type is
2. In Scratch program to add a new sprite click on from sprite area.
3. In Scratch program from sprite area you can
4. The main job of the sensor device is
5. The most advanced artificial intelligence is

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

1. Sensors devices help robot to learn new languages. ()
2. Software is the robot component which affect its weight and its ability to move. ()
3. You can download Scratch program freely from its official website. ()
4. In Scratch program you can change the sprite movement direction from move command. ()
5. Python language is used to develop web and artificial intelligence application. ()



Sample Test 3

1 Choose the correct answer from a, b, c or d.

1. In Python language variable data type which is used to store names and addresses is
a. number b. booleans c. string d. nothing
2. In Scratch program the area which is used to add sprite is
a. stage b. sprites c. blocks d. script
3. There are many types of robots like
a. industrial b. home c. medical d. all of them
4. The first step of the sensor device is
a. sensing b. converting c. display results d. nothing
5. There are many applications of the artificial intelligence in our daily life like
a. personal assistant b. smart cars c. smart shopping d. all of them

2 Complete the following sentences with the appropriate words in brackets.

(Educational program – sprites – Safety – Distance Sensors – machine language translator)

1. The sensor device type which used to avoid collisions
2. and employment are challenges facing robots technology.
3. Natural language processing is like as it understands human language.
4. is from Scratch program features.
5. From area sprites can be shown/ hidden.

3 Put (✓) in front of the correct sentence and (×) in front of the wrong one.

1. Robots and Machine learning are from Artificial intelligence field. ()
2. Distance sensors are used to avoid surrounding obstacles and collisions. ()
3. Python language is considered from the most difficult programming language. ()
4. Robots doesn't need software in its work. ()
5. The main job of sensors devices is picking up the environment changes and convert it to signals. ()

Sample Test 4

1 Choose the correct answer from a, b, c or d.

- The interactive Python interface is
 a. Booleans b. Editor c. Python Shell d. string
- In Scratch program from sprites area you can
 a. add sprite b. change sprite name
 c. delete sprite d. all of them
- From Scratch program features all the following except
 a. allow learning the complex code b. a learning program
 c. simple interface d. free program
- The most advanced artificial intelligence is
 a. narrow b. super c. general d. none of them
- The infrared sensors devices are used in
 a. remote controls b. non-contact thermometers
 c. both (a and b) d. none of them

2 Complete the following sentences with the appropriate words in brackets.

(print () – structure – motors – Infrared Sensors – Sprites)

- is considered the robot device muscles.
- In Scratch program area is used to add and delete sprite.
- In Python language function is used to display text and values on screen.
- The main part of the robot which carry all its components is
- is used to measure temperature without direct contact.

3 Put (✓) in front of the correct sentence and (✗) in front of the wrong one.

- The data type for the variable (school) in school = "Salam" is text. ()
- Python language cannot be integrated with any programming language. ()
- You can delete a sprite of stage from sprite area. ()
- Scratch program is considered a difficult program to learn. ()
- The artificial intelligence is just only one type. ()



1. is from artificial intelligence applications in our daily life.

2. Sensor devices are used to pick up images and videos.

3. Scratch program helps student in

4. Which of the following variables is a text type

5. Python language can be integrated with other language like

- (Develop web applications – software – print () – Motors – Save to your computer)

1. The responsible robot part of moving its components is

2. is what make a robot smart and determine how it responds.

3. In Scratch program to save your project which you create it from file menu select

4. You can use Python language in

5. is a function used to display text and values on screen in Python language.

1. In Python language text variables values are placed between single quotes ' ' or double " ".

2. General artificial intelligence focuses in work on performing a specific task. ()

3. Infrared sensors devices is used in remote controls. ()

4. In Scratch program the symbol (icon)  is used to execute the project. ()

5. Robot device pick up sounds using visible sensors. ()



Ten Sample Tests

Test 1

1 Choose the correct answer from a, b, c or d.

- sensors device help cars to determine the distance to other cars.
a. Sound b. Visible light c. Infrared d. Distance
- To add a new sprite click on
a. choose sprite b. Stage c. when  clicked d. Motion
- is a device that can be programmed to perform tasks automatically.
a. Sensor b. Scratch c. Robot d. Python
- Robot help in dangerous tasks like
a. cleaning house b. transportation system
c. agricultural watering
d. heavy weights and hazardous chemicals
- Applications of artificial intelligence in our daily life like
a. smart shopping b. personal assistance
c. Both (a, b) d. none of them

2 Complete the following sentences with the appropriate words in brackets.

(Educational program – sprites – Safety – Distance Sensors – machine language translator)

- The sensor device type which used to avoid collisions
- and employment are challenges facing robots technology.
- Natural language processing is like as it understands human language.
- is from Scratch program features.
- From area sprites can be shown/ hidden.

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

- Robot device doesn't need to software in his work. ()
- In Scratch program, the program section appear in stage area. ()
- In Python language the variable type is known by using type () function. ()
- In Scratch program the sprite location is determined by the value of the horizontal axis X, the vertical axis Y. ()
- The artificial intelligence is used in making smart games only. ()

Test 2

1 Choose the correct answer from a, b, c or d.

- express reserved places in memory to store and save specific value.
a. Variables b. Constants c. Functions d. None of them

2. To add a new sprite in Scratch program
 a. sound b. choose sprite c. motion d. say
3. In Scratch program interface there are areas like
 a. blocks b. stage c. sprites d. all of them
4. Sensors which are in robot has a function, it is
 a. analyzing data b. moving
 c. pick up information d. sending commands
5. Artificial intelligence are used in medical field like
 a. develop games b. analyzing data
 c. learning language d. diagnose diseases

2 Complete the following sentences with the appropriate words in brackets.

(Signal Conversion – Software – sprites – Super AI – Save to your computer)

1. The most advanced artificial intelligence is
2. The second step of sensor device work is
3. is what makes a robot smart and determine how it responds to information.
4. To save your project in Scratch program select from file menu.
5. In Scratch program you can hide / show sprite from area.

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

1. Type () function is used to know variable type in Python language. ()
2. The artificial intelligence is one type. ()
3. The robot is used in factories only. ()
4. In Scratch program you cannot share your works with your classmates. ()
5. To stop the project execution click on start. ()

Test 3

1 Choose the correct answer from a, b, c or d.

1. Challenges which face robots technology are
 a. safety b. employment c. ethics d. all the them
2. To display text, variables and arithmetic operation results in Python language the function is used.
 a. print () b. sin () c. type () d. none of them
3. The first step of sensor device work is
 a. transmission b. display c. sensing d. conversion
4. From data type in Python language
 a. number b. string c. booleans d. none of them
5. In Scratch program the block go to random position is used in
 a. move sprite a random movement b. delete sprite
 c. move to a specific place d. hide sprite



2 Complete the following sentences with the appropriate words in brackets.
(perform work with high accuracy – X, Y – picking up information – Float – diagnose diseases)

1. Sensors in robot help in
2. Artificial intelligence help doctors to
3. In production line robot help in
4. In Scratch program the sprite location on stage is determined by the value of
5. The variable $Z = 3.5$ data type is

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

1. In Python language text variables values are placed between single quotes ' ' or double " " . ()
2. General artificial intelligence focuses in work on performing a specific task. ()
3. Infrared sensors devices is used in remote controls. ()
4. In Scratch program the symbol (icon)  is used to execute the project. ()
5. Robot device pick up sounds using visible sensors. ()

Test 4

1 Choose the correct answer from a, b, c or d.

1. The interactive Python interface is
a. Booleans b. Editor c. Python Shell d. string
2. In Scratch program from sprites area you can
a. add sprite b. change sprite name
c. delete sprite d. all of them
3. From Scratch program features all the following except
a. allow learning the complex code b. a learning program
c. simple interface d. free program
4. The most advanced artificial intelligence is
a. narrow b. super c. general d. none of them
5. The infrared sensors devices are used in
a. remote controls b. non-contact thermometers
c. both (a and b) d. none of them

2 Complete the following sentences with the appropriate words in brackets.
(Download the program – print () – Choose a sprite – NumPy – software)

1. In Python the function which is used to display text and variables is
2. is what make a robot smart and determine how robot respond to information it receive.
3. To create a project using Scratch program you have first to
4. Click on to create a new sprite in Scratch program.
5. is Python library which is used in statistics.

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

1. The data type for the variable (school) in school = "Salam" is text. ()
2. Python language cannot be integrated with any programming language. ()
3. You can delete a sprite of stage from sprite area. ()
4. Scratch program is considered a difficult program to learn. ()
5. The artificial intelligence is just only one type. ()

Test 5

1 Choose the correct answer from a, b, c or d.

1. offer you suggestions for products that you might like.
a. Instant translator b. Machine learning
c. Smart shopping d. Smart games
2. Robotics technology is facing challenges like
a. safety b. employment c. ethics d. all of them
3. An area in Scratch program is called where the project appears in.
a. Blocks b. Script c. Stage d. Sprites
4. Python language is an language that it translate programming code line by line.
a. interpreted b. easy - to use c. integrated d. open source
5. In Python language the text value is placed between signs.
a. " " double b. ' ' single c. both (a and b) d. none of them

2 Complete the following sentences with the appropriate words in brackets.

(Pandas – Vision – Open source – type () – start )

1. To know the type of the variable function is used in Python language.
2. In Python language library is used to analyze and process data.
3. is an icon used to view the executing of the project in Scratch program.
4. Robot devices use sensors to take (pick up) images, videos.
5. From Python language features that it is language.

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

1. You can change the sprite movement direction by move command. ()
2. Scratch program doesn't enhance collaboration skills or creative thinking. ()
3. The controller is the brain of the robot, processing the data collected by sensors and issuing command to motors. ()
4. The first step of the sensor device work is displaying the results. ()
5. The artificial intelligence needs a huge amount of information. ()

**Test 6****1 Choose the correct answer from a, b, c or d.**

- is from artificial intelligence applications in our daily life.
a. Personal assistant b. Smart shopping
c. Smart cars d. All of them
- In robot device is considered the senses of a robot just as eyes and ears.
a. structure b. motors c. sensors d. controller
- The Block "Go to Random Position" in Scratch program is used to.....
a. move sprite to specific position b. move the sprite in a random motion
c. hide sprite d. delete sprite
- is an understandable language and it use words similar to english.
a. Python b. Java c. C# d. C++
- is a function that is used to display text, values on screen.
a. Type () b. Print () c. Editor d. Python shell

2 Complete the following sentences with the appropriate words in brackets.
(sensing – Python Shell – machine language translator – Surgical robot – Stage)

- The interactive Python interface is
- is an area in Scratch program used to display project.
- The sensor device first work step is
- The natural language processing is like as it understand human language.
- is a robot use sensors devices and help to perform surgeries.

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

- Robots and Machine learning are from Artificial intelligence field. ()
- Distance sensors are used to avoid surrounding obstacles and collisions. ()
- Python language is considered from the most difficult programming language. ()
- Robots doesn't need software in its work. ()
- The main job of sensors devices is picking up the environment changes and convert it to signals. ()

Test 7**1 Choose the correct answer from a, b, c or d.**

- The motors in robot devices like
a. electric b. pneumatic c. water (hydrous) d. both (a & b)
- Challenges that facing robotics technology are.....
a. increase independence on paper documents
b. safety, employment, ethics
c. increase independence on smartphone
d. none of them

3. The text variable value are placed between sign.
 a. ' ' single or " " double quotes b. < >
 c. > = d. = <
4. Robots devices help in dangerous tasks like
 a. means of transportation b. hazardous chemicals
 c. watering gardens d. house cleaning
5. The last step of sensor device work is
 a. transmission b. display results c. sensing d. conversion

2 Complete the following sentences with the appropriate words in brackets.

(print () – structure – motors – Infrared Sensors – Sprites)

- is considered the robot device muscles.
- In Scratch program area is used to add and delete sprite.
- In Python language function is used to display text and values on screen.
- The main part of the robot which carry all its components is
- is used to measure temperature without direct contact.

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

- Artificial intelligence doesn't need large amount of information. ()
- Robots are used in factories only. ()
- X axis and Y axis are used to identify the current sprite location on stage. ()
- Z = 10 The data type of the variable Z is integer number. ()
- In Scratch program we can not add more than one sprite on Scratch stage. ()

Test 8

1 Choose the correct answer from a, b, c or d.

- In Python language variable data type which is used to store names and addresses is
 a. number b. booleans c. string d. nothing
- In Scratch program the area which is used to add sprite is
 a. stage b. sprites c. blocks d. script
- There are many types of robots like
 a. industrial b. home c. medical d. all of them
- The first step of the sensor device is
 a. sensing b. converting c. display results d. nothing
- There are many applications of the artificial intelligence in our daily life like
 a. personal assistant b. smart cars c. smart shopping d. all of them



2 Complete the following sentences with the appropriate words in brackets.
(Choose a sprite – add or delete sprite – integer (int) – Super AI – picking up information)

1. In Python language $X = 5$ The variable X data type is
2. In Scratch program to add a new sprite click on from sprite area.
3. In Scratch program from sprite area you can
4. The main job of the sensor device is
5. The most advanced artificial intelligence is

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

1. The general artificial intelligence focus on performing a specific task. ()
2. Infrared sensors devices are usually used in remote controls devices. ()
3. Challenges which face robotics technology are safety, employment and ethics. ()
4. Scratch program is considered a difficult learning tool for many students. ()
5. You can integrate Python language with another language like C # , C + + , Java. ()

Test 9

1 Choose the correct answer from a, b, c or d.

1. is from artificial intelligence applications in our daily life.
a. Personal assistant b. Smart games c. Smart cars d. All of them
2. Features of Python language are
a. open source b. interpreted language
c. easy - to - use d. all of them
3. In Scratch Program you can change sprite size from its value in area.
a. sprites b. script c. stage d. blocks
4. Using robots in production lines leads to
a. decrease efficiency and productivity b. doesn't improve production
c. increase efficiency and productivity d. slow production
5. Sensors devices help robots to
a. learning new languages b. interacting with its environment
c. slow its operations d. none of them

2 Complete the following sentences with the appropriate words in brackets.
(Develop web applications – software – print () – Motors – Save to your computer)

1. The responsible robot part of moving its components is
2. is what make a robot smart and determine how it responds.
3. In Scratch program to save your project which you create it from file menu select
4. You can use Python language in
5. is a function used to display text and values on screen in Python language.

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

1. Natural language processing is like intelligent language translator. ()
2. It is not allowed that variable name begins with underscore - sign. ()
3. (X, Y) axis are used to determine the sprite location on stage. ()
4. To execute your project in Scratch program click on  icon. ()
5. The main job of the sensor devices is producing sound. ()

Test 10

1 Choose the correct answer from a, b, c or d.

1. is from artificial intelligence applications in our daily life.
 - a. Smart games
 - b. Digital Doctors
 - c. Instant translator
 - d. All the them
2. Sensor devices are used to pick up images and videos.
 - a. Sound
 - b. Touch
 - c. Light
 - d. Vision
3. Scratch program helps student in
 - a. learning principles of programming
 - b. develop collaboration skills
 - c. both (a, b)
 - d. none of them
4. Which of the following variables is a text type
 - a. City = "Cairo"
 - b. Y = 10
 - c. X = 3.5
 - d. is - student-success = True
5. Python language can be integrated with other language like
 - a. C #
 - b. C ++
 - c. Java
 - d. all of them

2 Complete the following sentences with the appropriate words in brackets.

(Motors – open source – Narrow & Super – print () – Surgical robot)

1. In Python language function is used to display text, results on screen.
2. Features of Python language are
3. is considered as robot muscles.
4. Artificial intelligence type are
5. is a device which uses sensor devices to perform surgeries operations.

3 Put (✓) in front of the correct sentence and (x) in front of the wrong one.

1. Sensors devices help robot to learn new languages. ()
2. Software is the robot component which affect its weight and its ability to move. ()
3. You can download Scratch program freely from its official website. ()
4. In Scratch program you can change the sprite movement direction from move command. ()
5. Python language is used to develop web and artificial intelligence application. ()

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



حمل الآن

مجانا وحصريا

امتحانات رقم (2)

الترم الثاني



Final Revision

Model Exam

1

1 Choose the correct answer:

- One of the common applications of sensors is the use of infrared in
a. smartphones b. remote controls
c. vacuum cleaners d. 3D scanning
- uses data science and machine learning.
a. Word b. Excel c. Python d. PowerPoint
- like Siri or Alexa use artificial intelligence to understand your commands.
a. Personal assistants b. Instant translators
c. Smart shopping sites d. Digital doctors
- The file extension for a Scratch project is
a. Docx b. Sb3 c. bmp d. Jpg
- are used to avoid obstacles.
a. Light sensors b. Sound sensors
c. Distance sensors d. Heat sensors

2 Put (✓) or (X): _____ سلسلة كتب الأستاذ

- 1 It is not possible to create applications and websites using Python. ()
- 2 The motors used in robots include electric motors and air motors. ()
- 3 The position of the Sprite can be changed on the stage by double-clicking on it. ()
- 4 Narrow artificial intelligence can perform any task that a human can perform. ()
- 5 Distance sensors help cars determine the distance to other vehicles. ()



3 Complete the following sentences:

- 1 The types of artificial intelligence include and
- 2 Robot components include and

Model Exam

2

1 Choose the correct answer:

- 1 One of the advantages of Python is that they are
 a. open source b. limited use c. not free
- 2 In Scratch program, to add a sound effect the sprite, use the command
 a. Repeat b. Looks c. Play sound
- 3 The file extension for a Scratch project is
 a. Docx b. Sb3 c. bmp
- 4 In Scratch, to add a new object, press on
 a. Start b. Sprite c. Blocks area
- 5 AI can solve problems that are difficult for humans to solve.
 a. Narrow b. General c. Super
- 6 In Scratch, the result of the work or project appears in the
 a. Blocks area b. Stage area c. Script area
- 7 One of the common applications of sensors is using infrared in
 a. vacuum cleaners b. smartphones
 c. remote controls

2 Put (✓) or (X):

- 1 In the wait command, the wait value of 1 represents 1 second. ()
- 2 The first step in the operation of the sensor device is signal conversion. ()
- 3 The position of an object on the platform is determined only by the value of the horizontal axis X. ()
- 4 Python is one of the most difficult programming languages. ()
- 5 The sprites used in the project appear in the Sprites area. ()
- 6 Numpy is a library used in data science, statistics, and artificial intelligence. ()
- 7 To determine the type of a variable, we do not need the type() function. ()

Model Exam

3

1 Choose the correct answer:

- 1 In Scratch, to repeat the movement of an object, we use the command.
 a. Start b. Repeat c. stop
- 2 A Scratch file extension is
 a. Docx b. Sb3 c. Bmp
- 3 In Scratch, to add sound effects to an object, we use the command.
 a. Repeat b. play sound c. Looks
- 4 To add a new object, click on
 a. Area Blocks b. Choose Sprite c. None of them
- 5 A new background is added to the project by clicking on
 a. Choose Sprite b. Choose Backdrop c. None of them



2 Put (✓) or (X):

- 1 In the wait command, the value of waiting represents 1 second. ()
- 2 In Scratch, the horizontal and vertical axis are used to know the current location of the object on the platform. ()
- 3 We use click and drag and drop to interact with any command inside the code segment. ()
- 4 To make the movement continuous, you can assemble the command several times. ()
- 5 Before executing any project, the objects coordinates on the platform should be $y=10$, $x=10$. ()

Model Exam

4

1 Choose the correct answer:

- 1 artificial intelligence can solve problems that are difficult for humans to solve easily and discover new things we never imagined before.
 a. Narrow b. General c. Super d. Precise
- 2 Laser rangefinders are accurate because they use
 a. sound waves b. visible light
 c. high frequency waves d. laser beams
- 3 The is used for non-contact temperature measurement.
 a. ultrasonic sensor b. infrared sensor
 c. light sensor d. motion sensor
- 4 A new background for the project is inserted in the Scratch program by pressing
 a. Choose a Backdrop b. Script Area
 c. Stage d. Choose Sprite

- 5 To execute the project, click on the icon
 a.  b.  c.  d. 
- 6 In Scratch, to repeat the sprite's movement 10 times from Control, we use the command.
 a. Repeat b. Start c. Choose Sprite d. Stop
- 7 To add a new object, press on
 a. Choose Sprite b. Start c. Repeat d. Play sound
- 8 One of the advantages of Python is that it is
 a. open source b. closed source
 c. not free d. limited use
- 9 The official website of Python is
 a. www.python.org b. www.python.edu
 c. www.pythonlibr.adp d. www.application.org
- 10 is a library for data analysis and manipulation.
 a. Pandas b. Matplotlib c. NumPy d. Angular
- 11 The function is used to display texts or values on the output screen.
 a. Cos() b. Type() c. Print() d. Sin()
- 12 One of the sensors that are used to measure distance using high frequency sound waves are
 a. ultrasonic sensors b. laser rangefinders
 c. infrared sensors d. motion sensors

2 Put (✓) or (X):

- 1 Before executing any project, the coordinates of the object at the stage are X=10 and Y=10. ()
- 2 In the Scratch program, students face difficulties in sharing projects with others. ()
- 3 Robots use communication tools to interact with users or other robot. ()
- 4 Self-driving cars rely entirely on artificial intelligence. ()

- 5 Python is considered an interpreted language because it translates the code line by line. ()
- 6 In Python, the NumPy library is used in data science, statistics, and artificial intelligence. ()

Model Exam

5

1 Choose the correct answer:

- 1 The first step in the operation of the sensor is
 a. transmitting b. sensing c. transduction
- 2 The "Sprite" in Scratch represents a/ an
 a. background b. object or character c. command block
- 3 To move the pen to a specific point, use the block.
 a. Go to x: y: b. Turn 15 degrees c. Move 10 steps
- 4 Python is programming language.
 a. a free b. an open source c. all of them
- 5 The structure of a robot can be made of materials, such as
 a. metals b. plastic c. all of them

2 Put (✓) or (X):

- 1 General artificial intelligence is more advanced. ()
- 2 Smart shopping gives you suggestions for products you might like. ()
- 3 The design of the structure affects the weight of the robot and its ability to move. ()
- 4 The Scratch program is paid. ()
- 5 The sprites used in the project appear in the Sprites area. ()

3 Choose the right scientific term for the following statements: (Narrow AI - Python)

- 1 It is a programming language widely used in data science, machine learning, and web development.
- 2 It focuses on specific tasks, such as face recognition or language translation.

Model Exam

6

1 Choose the correct answer:

- 1 To know the type of the variable statement in Python language, use the function.
 a. Cos() b. Type() c. Print() d. Sin()
- 2 To measure body temperature without direct contact, use the sensors.
 a. ultrasonic b. visible light c. laser d. infrared
- 3 To repeat the object's movement many times on the stage in Scratch program, use
 a. Repeat b. Move c. Wait d. Delete
- 4 Solving the problems that are difficult for humans to solve easily is a type of an artificial intelligence named
 a. General b. Narrow c. Super d. accurate
- 5 The default extension of the Scratch files is
 a. .sb3 b. .exe c. .zip d. .txt

2 Put (✓) or (X):

- 1 One of the disadvantages of Python is the lack of libraries that you can use. ()

- 2 Artificial intelligence can help doctors diagnose diseases. ()
- 3 The Scratch program is considered a difficult educational tool to use. ()
- 4 The design of the structure affects the weight of the robot and its ability to move. ()
- 5 The first step in the operation of sensors is transmission. ()
- 6 The Start command in the Scratch program is used to stop the project. ()
- 7 Self-driving cars depend entirely on artificial intelligence. ()

Model Exam

7

1 Choose the correct answer:

- 1 The smart vacuum cleaner is a type of robot used for floor cleaning.
 - a. industrial
 - b. household (domestic)
 - c. agricultural
 - d. medical
- 2 Robots help in carrying out some dangerous tasks such as
 - a. dismantling bombs
 - b. mountain climbing
 - c. cleaning homes
 - d. manufacturing electronics
- 3 One of the Artificial Intelligence (AI) applications we use in our daily life is
 - a. the calculator
 - b. instant translation (live/real-time translation)
 - c. programming languages
 - d. the mobile phone
- 4 is an educational tool that allows learning the basics of programming in a fun and engaging way, such as programming games and illustrated stories.
 - a. Artificial Intelligence
 - b. Scratch
 - c. Python
 - d. A robot

- 5 The Scratch program uses a simple visual interface based on a set of placed on top of each other in a specific order to create programs.
 a. Blocks b. Sprites c. Events d. Motions
- 6 In programming languages, represent a reserved location in memory for storing a specific value that can change during program execution.
 a. Constants b. Events c. Variables d. Functions
- 7 Artificial Intelligence is a type of AI that can discover new things that we could not have imagined before.
 a. General b. Narrow c. Broad/Wide d. Super
- 8 The Python programming language is characterized by
 a. being free and open source b. having only one use
 c. being an interpreted language d. being very fast
- 9 In the Scratch program, commands or blocks are moved in the area.
 a. Script/Programming area b. Stage area
 c. Sprites area d. Menu bar
- 10 To repeat the movement of the sprite on the stage a specific number of times, we use the command.
 a. Repeat b. Play Sound
 c. Go to d. Stop

2 Put (✓) or (X):

- 1 A robot is a device that can be programmed to perform a set of tasks automatically. ()
- 2 The personal assistant like the Siri application is one of the Artificial Intelligence applications. ()
- 3 The direction of the sprite in the Scratch program is determined by changing the values of the horizontal (X) and vertical (Y) axes. ()
- 4 The Python language is not suitable for developing websites and applications. ()
- 5 The Scratch program is characterized as being a free program. ()



3 Complete by using words between brackets:

(Sensors - Bluetooth - Strings - Touch Screen - Sprites - Robotic Arm - Motions)

- 1 The sprites used in a Scratch project appear in the area.
- 2 Robots use communication and interaction tools with humans and other robots, such as
- 3 Smartphones contain a group of sensing devices, including the
- 4 The types of variables we use to store texts like names and addresses in the Python language are called
- 5 devices capture information from the surrounding environment and convert it into electrical signals.

Model Exam

8

1 Choose the correct answer:

- 1 Artificial intelligence can solve problems that are difficult for humans to solve easily and discover new things we never imagined before.
 - a. Narrow
 - b. General
 - c. Super
 - d. Precise
- 2 Sensors help robots to
 - a. Teach them new languages
 - b. Increase their size
 - c. Slow down their operations
 - d. Allow them to interact with their environment
- 3 One of the features of the Python language is that it is
 - a. Open source
 - b. Closed source
 - c. Not free
 - d. Limited use
- 4 The Scratch program helps the student to
 - a. Remote controls
 - b. Learn the principles of programming
 - c. 3D scanning
 - d. All of the above

- 5 In production lines, robots can perform repetitive tasks accurately and without any delay, which leads to
- Slow production process
 - Decreased efficiency and productivity
 - Increased efficiency and productivity
 - Lack of product development
- 6 In Scratch program, to add sound effect to the sprite, use the command
- Repeat
 - Choose a Backdrop
 - Play sound
 - Looks

2 Put (✓) or (X):

- Variables in programming languages are a reserved place in memory to store and save a specific value ()
- Artificial intelligence can learn new things slowly ()
- The smart lighting system in the home uses sensors to turn on the lights automatically when someone enters the room ()
- The motors used in robots include electric motors and pneumatic motors ()
- Python is used in developing web applications, data science, artificial intelligence, machine learning, and game programming ()
- In the Scratch program, the student needs to write a lot of complex codes ()

3 Complete by using words between brackets:

(Personal assistant - Interpreted - Artificial intelligence - Sb3

- Remote controls - Docx - Type())

- is a branch of computer science.
- Python translates code line by line, which means it is
Language.

- 3 like Siri or Alexa use artificial intelligence to understand and execute your commands.
- 4 One of the common applications of sensors is the use of infrared rays in
- 5 To know the type of the variable statement, we use the function
- 6 The Scratch file extension is

Model Exam

9

1 Choose the correct answer:

- 1 A common application of sensors is the use of infrared in
 a. Smartphones كتيب الأستاذ b. Remote controls
 c. Vacuum cleaners d. 3D scanning
- 2 To add a new object, press on
 a. Start b. Choose Sprite
 c. Area Blocks d. Stop
- 3 If the movement is too fast, the command from Control Blocks is used. سلسلة كتيب الأستاذ
 a. Wait b. Repeat c. Forever d. Else
- 4 A is a library widely used in data science, statistics, and artificial intelligence.
 a. Pandas b. Matplotlib c. NumPy d. Angular
- 5 To take pictures and videos, we use sensors
 a. Sound b. Touch c. Light d. Vision
- 6 The text value of the variable is placed between the signs
 a. " " b. <, > c. >= d. =<,

2 Put (✓) or (X):

- 1 The first step in the operation of the sensor device is signal conversion. ()
- 2 Python is a free and open-source language, which does not allow anyone to develop it. ()
- 3 Medical robots help doctors performing surgeries. ()
- 4 TAHER, Taher, taheR, TaheR are 4 names of variables in the Python language. ()
- 5 Super artificial intelligence can solve specific problems. ()
- 6 Python can be integrated with other languages such as C, C++, and Java. ()

3 Complete the following sentences:

- 1 In the Scratch program, the result of the work or project appears in the
- 2 To display texts, variables, or even the results of mathematical operations, we use the function
- 3 in programming languages are a reserved place in memory to store and save a specific value.
- 4 In Scratch program, to execute the project, click on the icon
- 5 The file extension for Scratch project is
- 6 Artificial intelligence can solve problems that are difficult for humans to solve easily and discover new things we never imagined before.

Model Exam

10

1 Choose the correct answer:

- 1 One of the Common applications of sensors is the use of infrared in
 - a. Smartphones
 - b. Vacuum Cleaners
 - c. Remote controls
 - d. 3D scanning
- 2 Artificial intelligence can solve problems that are difficult for humans to solve easily.
 - a. narrow
 - b. general
 - c. Super
 - d. Precise
- 3 To execute the project, click on the icon
 - a. 
 - b. 
 - c. 
 - d. 
- 4 is a library for analyzing and processing data.
 - a. Pandas
 - b. Matplotlib
 - c. NumPy
 - d. Angular

2 Put (✓) or (X):

- 1 Self-driving cars rely entirely on artificial intelligence. ()
- 2 The robots' work is limited to factories only. ()
- 3 Scratch uses a visual interface based on blocks. ()
- 4 Python is an interpreted language because it translates codes line by line. ()

3 Complete by using words between brackets:

(Scratch - string - Artificial intelligence - motors)

- 1 is a branch of computer science.
- 2 The program helps the student learn the principles of programming.
- 3 The used in robots include electric and pneumatic.
- 4 City = "Cairo", the data type of the variable City is a

Answers

MODEL (1)

1 1 b 2 c 3 a
4 b 5 c

2 1 X 2 ✓ 3 X
4 X 5 ✓

3 1 Narrow AI, General AI
(or Super AI)
2 Sensors, Motors
(or Structure, Controller, etc.)

MODEL (2)

1 1 a 2 c 3 b 4 b
5 c 6 b 7 c

2 1 ✓ 2 X 3 X 4 X
5 ✓ 6 ✓ 7 X

MODEL (3)

1 1 b 2 b 3 b
4 b 5 b

2 1 ✓ 2 ✓ 3 ✓
4 ✓ 5 X

MODEL (4)

1 1 c 2 d 3 b 4 a
5 d 6 a 7 a 8 a
9 a 10 a 11 c 12 a

2 1 X 2 X 3 ✓ 4 X
5 ✓ 6 ✓

MODEL (5)

2 1 b 2 b 3 a
4 c 5 c

2 1 ✓ 2 ✓ 3 ✓
4 X 5 ✓

3 1 Python 2 Narrow AI

MODEL (6)

1 1 b 2 d 3 a
4 c 5 a

2 1 X 2 ✓ 3 X 4 ✓
5 X 6 X 7 X

MODEL (7)

1 1 b 2 a 3 b 4 b
5 a 6 c 7 d 8 a
9 a 10 a

2 1 ✓ 2 ✓ 3 X
4 X 5 ✓

3 1 Sprites
2 Bluetooth
3 Touch Screen
4 Strings
5 Sensors

MODEL (8)

- 1 1 c 2 d 3 a 4 b
5 c 6 c

- 2 1 ✓ 2 ✗ 3 ✓ 4 ✓
5 ✓ 6 ✗

- 3 1 Artificial intelligence
2 Interpreted
3 Personal assistant
4 Remote controls
5 Type()
6 Sb3

MODEL (9)

- 1 1 b 2 b 3 a 4 c
5 c 6 a

- 2 1 ✗ 2 ✗ 3 ✓ 4 ✓
5 ✗ 6 ✓

- 3 1 Stage Area 2 Print()
3 Variables 4 Green Flag
5 sb3 6 Super

MODEL (10)

- 2 1 c 2 c 3 a 4 a

- 2 1 ✗ 2 ✗ 3 ✓ 4 ✓

- 3 1 Artificial intelligence
2 Scratch
3 motors 4 string

حمل الآن

مجاناً وحصرياً

امتحانات رقم (3)

الترم الثاني



Model (1) - Comprehensive Exam



I. True or False:

1. Narrow AI is designed to perform a wide range of human tasks. ()
2. The controller processes sensor data and issues orders to the motors. ()
3. Scratch graphical commands are called "Blocks" and are placed on top of each other. ()
4. The input() function always takes data from the user as an integer. ()
5. Python is an open-source language, meaning it is free for everyone to use. ()

II. Choose the correct answer:

1. _____ is the field of AI that allows computers to recognize faces in images.
A) Machine Learning B) Expert Systems C) Computer Vision D) Robotics
2. Which part of the robot acts as the "muscles" to allow movement?
A) Controller B) Sensors C) Motors D) Software
3. In Scratch, the result of the sprite's movement appears on the _____.
A) Blocks Area B) Stage C) Script Area D) Menu Bar
4. Which operator in Python is used to check if two values are equal?
A) = B) != C) == D) <>
5. Smart machines like the Roomba used for cleaning floors are _____ robots.
A) Industrial B) Medical C) Domestic D) Educational

III. Fill in the blanks using: (Robotics - Boolean - Sprite - Machine Learning - float)

1. _____ is a field of AI that allows systems to learn from errors and data.
2. The _____ is the character or object that performs actions in Scratch.
3. A _____ variable in Python can only be either True or False.
4. Decimal numbers like 5.25 belong to the _____ data type.
5. _____ is the field concerned with building smart machines for dangerous tasks.



Model (2) - Comprehensive Exam



I. True or False:

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1. Python is an interpreted language that translates code line by line. ()
2. General AI (GAI) is limited to performing one specific task like translation. ()
3. The Stage center point in Scratch has the coordinates (0, 0). ()
4. A variable name in Python can start with a number like 1_name. ()
5. Ultrasonic sensors use high-frequency sound waves to calculate distance. ()

II. Choose the correct answer:

1. Which function is used to identify the data type of a variable in Python?
A) print() B) input() C) type() D) show()
2. The _____ is the physical frame that carries all the robot's components.
A) Software B) Controller C) Structure D) Motor
3. Scratch projects are saved with the file extension _____.
A) .py B) .sb3 C) .exe D) .doc
4. Which sensor allows a robot to detect changes in room brightness?
A) Sound B) Light C) Motion D) Heat
5. _____ is the most advanced type of AI that can solve complex human problems. A) Narrow AI B) Super AI C) General AI D) Machine Learning

III. Fill in the blanks using: (Case-sensitive - Sensors - Script - string - Indentation)

1. _____ are the components that act as the "senses" of the robot.
2. In Scratch, the _____ area is where blocks are connected together.
3. Python is _____, so the variable AGE is different from age.
4. Text like names and addresses belong to the _____ data type.
5. _____ is used in Scratch to define a sequence of connected blocks.



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Model (3) - Comprehensive Exam



I. True or False:

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1. The print() function is used to display text or values on the screen. ()
2. Deep Learning mimics the human brain using "Neural Networks." ()
3. A robot's structure can be made of materials like metal, plastic, or carbon. ()
4. The X-axis in Scratch represents the vertical position of the sprite. ()
5. Personal assistants like Siri and Alexa use AI to understand commands. ()

II. Choose the correct answer:

1. A robot used to help doctors perform surgeries is called a _____ robot.
A) Industrial B) Medical C) Domestic D) Educational
2. Which part of the sensor's work converts info into electrical signals?
A) Sensing B) Transmission C) Signal Conversion D) Storage
3. _____ is a visual tool that teaches programming through graphical blocks.
A) Python B) Scratch C) Teachable Machine D) Microsoft Edge
4. To start a program in Scratch, we click on the _____.
A) Red Circle B) Green Flag C) Blue Box D) Yellow Star
5. In Python, string values must be placed between _____.
A) Parentheses B) Brackets C) Quotes D) Commas

III. Fill in the blanks using: (Integer - wait - NLP - Batteries - Infrared)

1. _____ is the field of AI that helps computers understand human language.
2. The _____ data type is used for whole numbers like 5 or 10.
3. Remote controls usually operate using _____ sensors.
4. The _____ block in Scratch is used to slow down the sprite's movement.
5. _____ are a portable source of energy for many smart robots.



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Model (4) - Comprehensive Exam



I. True or False:

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1. You cannot use reserved words like False as variable names in Python. ()
2. Smart Games use AI to make characters learn from their mistakes. ()
3. The controller issues commands to the motors based on sensor data. ()
4. The Stage in Scratch has a horizontal (X) axis from -272 to 272. ()
5. Python is only available for the Windows operating system. ()

II. Choose the correct answer:

1. Which robot component is considered the "industrial muscle"?
A) Controller B) Motor C) Sensor D) Battery
2. To teach students how to program, schools use _____ robots.
A) Industrial B) Medical C) Educational D) Domestic
3. Which block group in Scratch contains the move and go to blocks?
A) Looks B) Motion C) Events D) Control
4. Non-contact thermometers use _____ sensors to measure temperature.
A) Ultrasonic B) Infrared C) Motion D) Light
5. Python was first released as a programming language in the year _____.
A) 1980 B) 1991 C) 2010 D) 2024

III. Fill in the blanks using: (Sprite Area - float - Expert Systems - Sensors - Loop)

1. _____ simulate human thinking to solve problems like medical diagnosis.
2. Decimal numbers like 8.32 are classified as the _____ data type.
3. To repeat a movement 10 times in Scratch, we use a _____ block.
4. _____ pick up info like heat or light and act as eyes for machines.
5. All the characters used in a project are displayed in the _____.



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Model (5) - Comprehensive Exam



I. True or False:

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1. Python uses simple syntax and words similar to the English language. ()
2. Narrow AI can simulate human creativity and adapt to all situations. ()
3. A robot's physical body frame is called its Structure. ()
4. The sb3 file extension is used for Scratch project files. ()
5. Machine Learning allows systems to recognize images and sounds. ()

II. Choose the correct answer:

1. To change the sprite's angle of movement in Scratch, you change _____.
A) Size B) X C) Direction D) Y
2. What is the data type of the value True or False?
A) int B) float C) str D) bool
3. Which of these is a library used for data science in Python?
A) Word B) NumPy C) Scratch D) Edge
4. The final step in a sensor's work is _____ results to another device.
A) Sensing B) Transmission C) Conversion D) Hiding
5. Which AI type can discover new things beyond human imagination?
A) Narrow AI B) General AI C) Super AI D) Machine Learning

III. Fill in the blanks using:

(Robotics - Interactive - Script - Teachable Machine - Smart Shopping)

1. Python's _____ mode executes code immediately to see results.
2. _____ analyzes buying behavior to provide product suggestions.
3. _____ is a tool to create AI models for recognizing images and poses.
4. Long and complex Python programs are written using a _____ editor.
5. _____ is the field of AI that deals with smart machines like the Roomba.



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Model (6) - Comprehensive Exam



I. True or False:

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1. Python is a case-sensitive language, so TAHER is not the same as tahir. ()
2. Industrial robots improve productivity and reduce human errors in factories.
3. The input() function can only take text, it cannot take numbers. ()
4. Scratch allows you to hide or show a sprite on the stage. ()
5. Super AI is the level of AI commonly found in today's smart assistants. ()

II. Choose the correct answer:

1. Which function identifies the data type of x = 5?
A) print(x) B) type(x) C) int(x) D) input(x)
2. The _____ sensor allows a robot to detect objects using sound waves.
A) Heat B) Ultrasonic C) Motion D) Light
3. To assemble commands in Scratch, we drag them into the _____.
A) Menu Bar B) Stage C) Script Area D) Sprites Area
4. Which type of AI performs a specific task like playing chess?
A) Narrow AI B) General AI C) Super AI D) Machine Learning
5. In Python, name = "Omar" makes the variable a _____ data type.
A) float B) int C) bool D) str

III. Fill in the blanks using:

(Interpreter - Sensors - Logic - Controller - Deep Learning)

1. The _____ processes sensor data and issues orders to the motors.
2. _____ enables systems to learn complex tasks like humans.
3. Python uses an _____ to translate and execute code line by line.
4. _____ are devices that transform environmental changes into signals.
5. _____ variables in Python are used for True/False comparisons.

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With My Best Wishes Mr_Ebrahim Elkomy **01096169792

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

